

FACT SHEET/STATEMENT OF BASIS

NPDES PA0026824

Prepared by: David R. Ponchione

Date: December 28, 2007

Outfall 001

Phone: 412-442-4000

(ES) Clairton Municipal Authority (CMA)

(MUN) City of Clairton

(AF) Clairton Sewage Treatment Plant

(CO) Allegheny

This application is for a renewal that was previously issued on September 6, 2002.

The Clairton STP was originally constructed under State Permit No. 8775-S dated May 17, 1956 as a 2.0 mgd primary treatment plant that went into operation December 9, 1963. The plant was expanded to 6.0 mgd and upgraded to secondary treatment under State Permit No. 0271416, dated June 29, 1971. The expanded plant went on line November 28, 1978, treating sewage generated from systems owned by the City of Clairton, Jefferson Borough, South Park Township Sewer Authority and Peters Creek Sanitary Authority.

The Clairton STP discharges to Peters Creek approximately 2,200 feet from the Monongahela River. Of that 2,200 feet distance, roughly 400 feet immediately below the discharge is open stream. The remaining 1,800 feet is culverted under the Penn Central RR and the U.S. Clairton Works. Peters Creek enters the Monongahela River at approximately RMI 19.7 where the Q7-10 flow is 760 cfs. Consistent with previous modeling efforts, the Monongahela River continues to be the point of discharge for the Clairton STP because of its proximity to the Monongahela River and the character of Peters Creek between the discharge and the river.

The stream flow to waste flow ratio at the mouth of Peters Creek is approximately 82:1 (760 cfs : 9.3 cfs). Ample dilution allows imposition of secondary treatment requirements that will not cause criteria violations in the river. WQAM63, Release 1.2, confirmed that no ammonia-nitrogen or dissolved oxygen limitations are necessary, and that secondary limitations for the CBOD5 parameter are appropriate. The existing total residual chlorine and fecal coliform effluent limitations also are reapplied. The sewage limitations are the same as imposed in the previous NPDES permit.

The application indicates there are no categorical industrial users discharging to the Clairton STP. The applicant was only required to sample Group 1 parameters, but analyzed parameters listed in Groups 1-3. The parameters were analyzed using detection levels required by the application. All parameters with specific concentrations were evaluated using PENTOSXD, Release 1.03. The modeling results confirmed that no water quality based effluent limitations are required.

FACT SHEET/STATEMENT OF BASIS

NPDES PA0026824

(ES) Clairton Municipal Authority (CMA)

(MUN) City of Clairton

(AF) Clairton Sewage Treatment Plant

(CO) Allegheny

The CMA, at the direction of the U.S. Environmental Protection Agency (EPA), conducted an Industrial Waste Pretreatment Survey during 1987 and 1988. The survey was conducted in accordance with applicable regulations for wastewater treatment facilities having a design capacity greater than 5.0 mgd. The results of the survey indicated that no industrial wastes were conveyed to or treated at the facility. Based upon the results of the survey, the Authority was granted a special exemption from the Industrial Waste Pretreatment Program by the EPA.

There are five storm water outfalls within the vicinity of the CMA STP. Part A, Page 2c of 14 lists the outfalls. Part C of the NPDES Permit was conditioned to require uncontaminated storm water be discharged from the outfalls. The outfall numbers are identified as 007-011, consistent with the previous NPDES permit.

Part A, Page 2b of 14 lists the five combined sewer overflows within the sewer system. They are once again numbered 002-006, consistent with the previous NPDES permit. Appropriate monitoring and reporting for use of the CSOs is included in Part A of the permit. Also, Part C of the permit contains our current Phase 3 requirements for Management and Control of the CSOs, including continued implementation of the Nine Minimum Controls. The CSO Long Term Control Plan was approved by the Department on December 11, 2007. The LTCP calls for a two-phased implementation approach that includes collection system improvements, followed by flow monitoring as one component, and upgrades and improvements to the WWTP facilities as the other. The LTCP commits to implement both phases concurrently. The implementation schedule also specifies the LTCP implementation and its associated Post-Construction Compliance Monitoring Plan be complete within 69 months of the implementation schedule's target start date of February 2008. Table 15 (enclosed) on Page 95 of the permittee's CSO Long Term Control Plan Report dated March 2007 summarizes tasks proposed in that report and provides a general implementation schedule. Those tasks were incorporated into the following Scheduled Interim Milestones in the Part C, CSO condition with revised dates agreed upon by the Departments CSO coordinator Paul Eiswerth.

Scheduled Interim Milestones**Compliance Due Date**

Phase I: Upgrades and Improvements to CSS

- | | |
|---|--------------------------------------|
| a) Additional Flow Monitoring at St. Clair, New Jersey/Wilson and Miller Pump Station | 1 month after permit effective date |
| b) Analysis of Flow Data and Determination of Additional Corrective Measures to CSS | 2 months after permit effective date |
| c) Complete Design Report for CSS Upgrades and Improvements | 5 months after permit effective date |
| d) Submit Design of CSS Upgrades and Improvements to DEP | 6 months after permit effective date |

FACT SHEET/STATEMENT OF BASIS

NPDES PA0026824

(ES) Clairton Municipal Authority (CMA)

(MUN) City of Clairton

(AF) Clairton Sewage Treatment Plant

(CO) Allegheny

- | | |
|---|--|
| e) Elimination of Dry Weather Overflows and Non-Permitted CSOs | 10 months after DEP approves design of CSS upgrades and improvements |
| f) Phase I Post Construction Monitoring Period | 6 months after elimination of dry weather overflows and non-permitted CSOs |
| Phase II: Upgrades and Improvements to the WWTP | |
| a) Complete Design Report for WWTP Facility Upgrades | 6 months after permit effective date |
| b) Submit Design of Facility Upgrades to DEP | 18 months after permit effective date |
| c) Notice to Proceed Issued to Contractors | 6 months after DEP approves design of WWTP upgrades |
| d) Option to submit Presumption Approach Flow Management Plan Request for Wastewater Treatment Plant Flow Bypass Scenario | Before June 2010 |
| e) Construction of Facility Upgrades Complete and On-Line | 51 months after permit effective date |
| f) Submittal of the Post-Construction Compliance Monitoring Plan to DEP | On or before June 2012 |

The permittee completed its Whole Effluent Toxicity Testing (WETT) obligations for this permit renewal cycle. The results of the tests revealed no WETT failures occurred. The permit was conditioned to require the permittee submit the results of WETT with their next permit renewal application.

The discharge monitoring and inspection reports reveal the Clairton STP achieves its effluent limitations.

ADDENDUM – March 28, 2008

During the draft comment period, KLH Engineers, Inc. on behalf of CMA, requested revisions to the combined sewer overflow compliance schedule listed in Part C, Requirement No. 7, Section F of the draft permit. Their requests are outlined in a letter dated March 10, 2008 (enclosed). The Department agreed to delete language pertaining to the upgrades and collection system improvements because they are under the jurisdiction of the City of Clairton, however, the time tables to implement upgrades and improvements to the WWTP remain. A redraft of the permit was prepared allowing 30 additional days for comment. Refer to the redraft cover letter for more information.

FACT SHEET/STATEMENT OF BASIS

NPDES PA0026824

(ES) Clairton Municipal Authority (CMA)

(MUN) City of Clairton

(AF) Clairton Sewage Treatment Plant

(CO) Allegheny

Per discussion with Mr. Eiswerth, he will work with the City of Clairton and the Allegheny County Health Department, and require the City of Clairton to obtain a general permit to ensure the City of Clairton complies with sewer improvement obligations. He plans to arrange a field visit to inspect their sewer system to verify what actually exists in their system.

ADDENDUM – September 18, 2008

The Department received additional written and verbal comments regarding the re-draft permit issued on April 2, 2008 that will require a 3rd and final draft of NPDES Permit PA0026824.

Some of the municipalities that are tributary to the Clairton STP expressed concern with the combined sewer overflow compliance schedule due dates listed under Part C, Requirement No. 7 and requested additional time to have more input in the final STP design. Of major concern was that flow monitoring used to develop the LTCP did not account for the potential impact of the 537 planning process for the tributary basins. Representatives from the City of Clairton, Borough of Jefferson Hills, Township of South Park, Peters Creek Sanitary Authority, the Clairton Municipal Authority and the Department met on September 17, 2008 at the Clairton Authority's boardroom to discuss the compliance schedule. All parties agreed to the Department's compromise to allow the parties additional time to resolve design flow concerns by giving the permittee an additional 6 months to complete the design report for the WWTP facility upgrades (6 months after permit effective date to 12 months after permit effective date), and an additional 6 months to submit the final design for the facility upgrades (24 months after the permit effective date in lieu of 18 months after the permit effective date). Construction of the facility upgrades are now required to be completed and on-line 57 months after the permit effective date in lieu of 51 months after the permit effective date.

Also, CSO coordinator Paul Eiswerth of the Department recently inspected the City of Clairton's collection system and discovered an un-permitted CSO structure. The Clairton Municipal Authority was contacted and agreed it should be added to their NPDES permit. The CSO outfall is numbered 007. Storm water outfalls previously identified as 007-011 are renumbered 008-012, respectively.

ADDENDUM – January 27, 2009

The Clairton STP is currently accepting wastewater from oil and gas well operations. The Department issued an Administrative Order on October 23, 2008 that restricts the volume of oil and gas wastewater the Authority may accept and is waiting for the treatability study that demonstrates the impact it has on the treatment process. Consulting engineer John Mowry informed this writer he expects the report to be submitted to the Department late February. The Authority was informed the Department will not approve acceptance of the oil and gas wastewater until the study is completed and a revised NPDES application is submitted that reflects their intention to accept and treat the oil and gas wastewater.

FACT SHEET/STATEMENT OF BASIS

NPDES PA0026824

(ES) Clairton Municipal Authority (CMA)

(MUN) City of Clairton

(AF) Clairton Sewage Treatment Plant

(CO) Allegheny

If the Authority decides to accept oil and gas wastewater, they were informed an average monthly TDS limit of 500 mg/l will be imposed in an amended NPDES permit. This is equal to the streams criteria and is necessary due to the high TDS levels in the Monongahela River. The Authority was also informed the permit would be conditioned to include an EPA approved pretreatment plan. Furthermore, the Department will likely require some technology standard yet to be determined.

DRP:dk